CLAIMS

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A method of pretreating paper pulp, in which method paper pulp, either totally or at least the main part of it, is fed by means of a gas separation tank feed pump (12, 120) into a gas separation tank (16) and from there by means of a fan pump (18) further to the head box (22) of the paper machine, characterized in that the paper pulp is fed into the gas separation tank (16) by means of a propeller pump (12).

- 2. A paper pulp pretreatment method according to claim 1, characterized in that prior to being transferred into the gas separation tank (16), of the fractions forming the paper pulp at least the filler fraction and the fiber fraction are treated separately in their own screening stages in order to remove impurities from said fractions, after which said fractions are combined to form paper pulp.
- 3. A paper pulp pretreatment method according to claim 1, characterized in that various sorts of fiber pulp (e.g. VF, DIP, BR) contained in the paper pulp are treated separately each in its own screening stage.
- 4. A paper pulp pretreatment method according to claim 2 or 3, characterized in that centrifugal cleaning is used in said screening stages.
- 5. A paper pulp pretreatment method according to claim 2 or 3, characterized in that a pressure screen is used in said screening stages.
- 6. A paper pulp pretreatment method according to claim 1, characterized in that the paper pulp is fed by means of a propeller pump (12) into the gas separation tank (16) directly from the white water tank (10) without employing special cleaning.

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7. A paper pulp pretreatment method according to claim 1, characterized in that the paper pulp is transferred into the gas separation tank (16) from a white water tank (100) located essentially at the machine level.

- An apparatus for pretreating paper pulp, which apparatus comprises at least a gas separation tank feed pump (12), a gas separation tank (16), a fan pump (18) and a head box (22) of a paper machine, <u>characterized</u> in that said gas separation tank (16) feed pump is a propeller pump (120), by means of which the paper <u>pulp</u> is fed from the white water tank (10) or the like into the gas separation tank (16).
- 9. An apparatus according to claim 8, <u>characterized</u> in that it comprises in the process order prior to the gas separation tank feed pump (120) both means (54) for screening the filler slurry and means (46, 48, 50) for screening the fiber pulp.
- 10. An apparatus according to claim 9, <u>characterized</u> in that said filler slurry screening means comprise a centrifugal cleaning arrangement (54).
- 11. An apparatus according to claim 9, <u>characterized</u> in that said fiber pulp screening means comprise a centrifugal cleaning arrangement (46, 48, 50).
- 25 12. An apparatus according to claim 9, <u>characterized</u> in that said fiber pulp screening means comprise a pressure screen.
- 13. An apparatus according to claim 9, 11 or 12, characterized in that said fiber pulp screening means comprise a special individual screening device (46, 48, 50) for each sort of fiber pulp.

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- 14. An apparatus according to claim 11, 12-or 13, characterized in that said fiber pulp screening devices (46, 48, 50) are located in the process order prior to the white water tank (10) or the like, which, in turn, is located prior to the gas separation tank feed pump.
- 15. An apparatus according to claim 8, <u>characterized</u> in that said gas separation tank (16) is provided with means for regulating the inlet pressure of the fan pump (18) without overflow.
- 16. An apparatus according to claim 8, <u>characterized</u> in that the white water tank (100) and the feed pump (120) are located essentially at the machine level (K).
- 17. An apparatus according to claim 16, <u>characterized</u> in that the surface level height difference between the white water tank (100) and the gas separation tank (16) is no more than 9 meters
- 18. An apparatus according to claim 16, <u>characterized</u> in that the surface level height difference between the white water tank (100) and the gas separation tank (16) is preferably less than 6 meters, suitably 2 4 meters.

